

**Amendments to the Specification:**

Please replace the second full paragraph beginning at page 1, line 4, with the following rewritten paragraph:

-- Reactor cells having channels through which gas is passed are widely used in the treatment of gases, for instance in the purification of exhaust and flue gases. On the surfaces of the channels, there are active agents such as catalysts. Such reactor cells may be made from metal sheets. The sheets are coated with ceramic porous support[[, to]] in which the active metals or metal oxides are immobilized. Also fully ceramic reactor cells are being manufactured.--

Please delete the second full paragraph beginning on page 2, lines 7-8.

Please replace the last paragraph beginning at page 2, line 31, with the following rewritten paragraph:

--The corrugation shapes, sizes and directions of the reactor cell sheets as well as the density of ~~openings~~ channels in the reactor cell cross section are selected according to the ~~inteded~~ intended application.--

Please replace the paragraph beginning at page 3, line 1, with the following rewritten paragraph:

--The reactor cell may also have many different shapes, it may e.g. be a spiral, bent to S-, J- or V-form or stacked or bent reactor cell. The density of the ~~openings~~ channels may for instance be 1 to 300 ~~openings~~ channels per cm.<sup>2</sup>, preferably 1-10 or 10-50 or 50-100 or 100-300 ~~openings~~ channels per cm.<sup>2</sup>. Further, the thickness of the sheet may vary. In this manner, reactor cells with very different flow properties may be accomplished. The cross section of the housing may be varied freely according to the intended application. It may for instance be circular, oval or semiparallelogram. Sizes and shapes of the housings conventional in the art may be preferably used.--

Please replace the last paragraph beginning at page 3, line 32, with the following rewritten paragraph:

-- The reactor cell of the invention may also be made from relatively thin sheets thus decreasing the thermal mass thereof. Accordingly, the reactor cell warms up and thus the operation thereof also starts more quickly. Accordingly, the performance thereof under extremely demanding conditions is very good. [[The]] Pressure loss caused by the reactor cell of the invention made from thin sheets ~~caused pressure loss~~ is also low. The thicknesses of the sheets may be for instance from 0.01 to 0.2 mm, such as from 0.02 to 0.05 mm. The heights of the

corrugations may be e.g. between 0.2 and 5 mm, such as 0.1 to 2 mm.--

Please replace the last paragraph beginning at page 6, line 26, with the following rewritten paragraph:

-- According to an object of the invention the reaction cell is connected to the housing or to part of it by weld joints made by resistance welding. The resistance welding can preferably be made simultaneously when joining sheets together by resistance welding. The resistance welding can be made so that the reaction cell is installed inside the housing and the whole reaction cell and the whole housing are welded together. The resistance welding can also be made preferably so that a half of the reaction cell is installed inside a half of the housing and these are welded together. After that, ~~a hole~~ ~~away~~ ~~of~~ the reaction cell and the housing can be connected by welding two connected splits together. --

Please replace the heading beginning at page 8, line 3, with the following heading:

~~-- DETAILED DESCRIPTION OF THE INVENTION~~ BRIEF DESCRIPTION OF THE DRAWINGS--.

Please replace the paragraph beginning at page 8, line 12, with the following rewritten paragraph:

--DETAILED DESCRIPTION OF THE INVENTION

In FIG. 1, a reactor cell 1 comprises a corrugated sheet 2 joined at corrugations 31 to another corrugated sheet 3 thereupon and to a flat sheet 4 thereunder with joints 5. The corrugated sheet 2 is a profiled sheet with corrugations, having a thickness of about 0.1 mm, the height of the corrugations being about 1 mm. The corrugated sheet 2 is also joined at corrugations 31 to the bent section thereof. The reactor cell is inserted into a housing 7. The reactor cell 1 comprises on the bottom ~~[[as]]~~ a corrugated sheet 6 a sheet having V-shaped corrugations ~~profiles~~ and joined at joints 5 to the flat sheet 4. Channels 9 through which the gas being treated is passed are formed between the sheets 2, 3, 4, 6. The joints 5 between the sheets 2, 3, 4, 6 are spaced apart by 0.5 to 1.5 mm intervals. The corrugated sheet 3 is also connected to the housing 7 by weld joints 8, 10. The joints 5, 8, 10 are preferably made by resistance welding.--

Please replace the paragraph beginning at page 9, line 11, with the following rewritten paragraph:

-- In FIG. 4, a reactor cell 41 is inserted into a housing 47. The reactor cell 41 is connected to the housing ~~[[41]]~~ 47 by means of connecting grooves 43, 44, 45 on the housing wall. The connecting grooves are engaged with the sheets 42 of the reactor cell 41. A weld joint 46 is further made on the

bottom of the connecting groove 43. The reactor cell 41 is joined to the housing 47 not only with the connecting grooves 43, 44, 45 but also with the weld joint 46. Above connecting method is particularly stable since both the connecting grooves 43, 44, 45 and the weld joint are engaged with the sheets 42 of the reactor cell 41.--

Please replace the paragraph beginning at page 9, line 18, with the following rewritten paragraph:

-- In FIG. 5, reactor cells 51, 52 of the invention are inserted ~~[[to]]~~ into a housing 57 that is conical at both ends. The reactor cells 51, 52 are wedged both against the walls 57a, 57b of the housing 57 and against each other when exposed to the flow pressure of the gas being treated. The reactor cells 51, 52 are wedged towards the walls 57a, 57b of the housing also by the thermal expansion due to the treatment of gases at high temperatures, thus engaging them firmly with the housing 57. The cone angle  $\alpha$  of the conical sections of the housing 57 is about 7 degrees. Pressure and power losses due to turbulences of the gas flow and shortcut flows in the conical housing 57 and the reactor cell 51 are particularly low.--

Please replace the paragraph beginning at page 9, line 26, with the following rewritten paragraph:

-- An embodiment of the reactor cell of the invention (Kemira) and some commercially available reactor cells were subjected to a comparative mechanical resistance test (Cycle 2010). The reactor cell [[42]] 41 comprised corrugated sheets 2, 3 with oblique ~~profiles~~ corrugations joined together by resistance welding at an angle of 40 degrees relative to the ~~profiles~~ corrugations [[31,]] 32, 33, the joint density being 200 joints/cm.sup.3. The reactor cell was inserted into a round housing 47 and connected thereto by means of three connecting grooves 43, 44, 45. Further, a weld joint 46 was formed on the bottom of one of the connecting grooves using laser welding.--

Please replace the paragraph beginning at page 10, line 13, with the following rewritten paragraph:

-- REACTOR CELL	TIME AND RESULT
Kemira nailed spherical	5 h, damaged
Nippon Steel	10 h, damaged
Soldered Emitec	[[5,5]] <u>5.5</u> h, damaged
Soldered Emitec	5 h, damaged
Kemira [[WMC]]	50 h undamaged